Amendments to the Claims:

1.   (currently amended) A method for routing packets in a router having a plurality of router interfaces through which the packets are received from a plurality of address domains, the method comprising:

dedicating a separate routing table in the router to each address domain of the plurality of address domains;

associating each router interface with one of the routing tables;

~~and~~

executing a single IP stack to receive a packet from any of the router interfaces and to identify the associated routing table in the router for handling the received packet and,

in the event of a route change received from more than one of the plurality of address domains, updating each routing table associated with each address domain for which a route change has been received via the single IP stack.

2.   (canceled)

3.   (previously presented) The method of claim 1, wherein a mapping array associates interfaces connecting to the same address domain with the same routing table.

4.   (previously presented) The method of claim 1, wherein executing a single

IP stack forwards a received packet according to the identified routing

table when the received packet is a data packet and updates the

identified routing table when the received packet is a control packet.

5.   (canceled)

6.   (original) The method of claim 1 wherein each of the plurality of address

domains represents a virtual private network.

7.   (currently amended) A router comprising:

        a plurality of router interfaces through which packets from a

plurality of address domains are received;

        a separate routing table in the router associated with each address

domain; and

        a domain manager executing a single IP stack to receive a packet

from any of the router interfaces and to identify an appropriate

associated routing table in the router for handling the received packet,

the domain manager functional in the event of a route change received

from more than one of the plurality of address domains to update each

routing table associated with each address domain for which a route

change has been received via the single IP stack.

8.   (canceled)

9.   (previously presented) The router of claim 7, wherein the domain

        manager comprises a mapping array that associates each interface to a

        routing table.

10.   (previously presented) The router of claim 7, wherein the domain

        manager executing the single stack forwards a received packet according

        to the identified routing table when the received packet is a data packet

and updates the identified routing table when the received packet is a

control packet.

11.   (canceled)

12.   (original) The router of claim 7 wherein each of the plurality of address

domains represents a virtual private network.

13.- 20. (canceled).